THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. XLVI. Wednesday, April 7, 1852. No. 10.

PROF. CHRISTISON'S LECTURE ON THE PRESENT STATE OF MEDICAL EVIDENCE.

[Continued from page 181.]

The general doctrine in law, that witnesses must speak to facts only, and that their opinions are not admissible as evidence, rests on two grounds. The first is, that the forming of opinions is the proper province of the jury. This is usually the only reason assigned. But another, not less important, is that an opinion can seldom be formed on any branch of a case, however subordinate, without the witness exercising his judgment as to the truth of the facts deposed to—a function which belongs even more peculiarly to the province of the jury.

But the general doctrine must be violated when questions of science arise in the course of the evidence; because the jury do not possess the requisite scientific knowledge, either to determine the truth of the facts, or to draw from them sound conclusions. Hence, in questions of law, occurring upon trials, the judge is interposed between the facts and the jury; and his opinion is imperative. For the same cause, in questions of medical science, or of physical science generally, professional or scientific men are interposed, who, though nominally witnesses, really discharge the function of judge; but with the material difference, that the jury is not bound to adopt the judgment. Nothwithstanding this difference, however, it stands to reason, that the medical witness should be placed as far as possible in the same favorable circumstances with the judge for forming an opinion. It will be seen by-and-by, whether or not courts of law have studied to provide him with that advantage.

Medical evidence consists partly of facts and partly of opinions.

1. Medical facts are derived by the witness in part from the evidence of sense, but in part, also, from that of testimony—that is, from his own observation, or from that of other witnesses.

The facts derived from his own observation are thus obtained as evidence, sometimes because he has been incidentally cognisant of them in the ordinary exercise of his profession, and sometimes because he is employed, in criminal cases, on the part of the crown or the prisoner, in civil cases, by either party in the cause, expressly to conduct professional inquiries relating to it.

In the former case, viz., when deposing to facts occurring to him in-

cidentally to the ordinary exercise of his profession, a medical witness is usually considered more trustworthy than one who deposes as a witness employed expressly to investigate the facts; for the facts observed in the former way, having been observed without any relation to the questions arising in the cause, are more likely to have been noticed without bias. For it is a principal in law, as well as in reason, that "evidence is more or less deserving of credit, as it is more or less undesigned" *(Glassford*, p. 308); or according as it was prepared or not for the case.

This principle, however, has been allowed too wide an influence in the appreciation of medical evidence in courts of law. An exception has indeed been tacitly admitted in the instance of "experts" employed on the part of the crown to conduct medical inquiries in criminal proceedings; because, as the public prosecutor, at least in Scotland, can very rarely have any other than a public interest in any such case, so the medical expert, as his functionary, can have no conceivable bias, except, indeed, that universal bias from which no man, whether lawyer or physician, witness or judge, can be entirely exempt—the desire to support his opinion when it has been once dispassionately formed. In civil trials, on the other hand, a decided preference is usually shown in courts to incidental medical evidence, over that which is the result of express investigation undertaken at the request of parties or their agents. And this is in general right, so long as the present objectionable mode of obtaining such evidence is adhered to. At the same time I cannot help remarking, that frequently in civil, and sometimes even in criminal law, too decided a preference is given to medical facts incidentally observed over those ascertained expressly for the case. For scarcely any medical man determines the whole particulars of a medical case for the purposes of ordinary practice, with the same care which is taken when he knows that his observations are to be made the subject of review in a court of law. And besides, the medical witnesses, who conduct inquiries expressly for the cause, are selected always for their skill, and commonly also for their character; while incidental witnesses must be taken as they come, and indeed are on many occasions, especially in criminal trials, and for an obvious reason, of no great professional standing. On these accounts, the objection arising from possible bias on the one hand is counterbalanced by that depending upon probable loose observation on the other. And consequently, if the risk of bias could be excluded, as it might in general be by a modification of the present mode of admitting the evidence of "experts," I apprehend that in that case the general principle now under consideration might be reversed in the instance of medical evidence.

The facts of medical evidence are derived not only from the personal observation of the witness, but likewise from the testimony of others. And herein lies much of its weakness.

In legal inquiries, in truth, it is but a small part of the facts constituting the basis of medical opinions that rests on the evidence of the medical witness's own senses. Always a large part, often the whole, is supplied by the observation and memory of others, who being unprofessional persons, or even although members of his own profession, may be little competent to observe, to appreciate, or to recollect.

Of the facts derived from testimony, some are deposed to in court in the cause, and others have been collected previously out of court, and with more or less, or no, legal formality. These circumstances must variously affect their validity, both in law and in reason and common sense.

A preference is always given to those facts of testimony which are directly sworn to in the course of the trial, as having been observed by the witness who deposes to them. The reason for this is, that they are subject to the test of cross-examination (*Amos*, Med. Gaz., vii., 548). But I may observe, that medical facts of this kind, though subject to the test, are far from being always subjected to it; for neither counsel nor judge may be always aware when they require it. Hence I have often had occasion to notice that they are allowed more weight than they deserve, when they come to be applied as the basis of medical opinions.

There is no more important principle of the law of evidence, than that it ought to be founded only on facts sworn to in court. A well-known exception, however, exists in regard to the statements of a deceased person, made in relation to the cause while aware that he is upon his death-bed. But a far wider exception has also been long tacitly allowed in law courts, and is now expressly admitted by some legal authorities on the law of evidence—viz., the history of his own case by a deceased person, although not aware he is dying, or though not upon death-bed at all, given to his medical attendant, or even to an unprofessional person, who deposes to the statement in the cause. Thus Mr. Amos observes, "Are we, then, to infer, that what a patient says to his medical attendant can rarely become matter of judicial investigation? By no means. Inquiries by medical men, with the answers to such inquiries, are often received as evidence of the state of health of the patient at the time" (vii., 548). So, too, Mr. Alison says, that in English practice "the account given by a deceased person of his own bodily state during illness, or immediately after injury has been received," isadmitted in evidence, although hearsay (Practice, 521). It is remarkable, however, that this statement should be restricted by the author to English law, since nothing can be more certain than that the same is constantly followed in Scotch courts, where, in charges of murder or culpable homicide, and on trials for reduction of wills on the plea of insanity, or of death-bed, as well as for nullity of assurances on lives, both medical and other witnesses are daily allowed to depose to medical facts of extreme consequence, which they obtained from the deceased patient though unaware that he was dying.

It is quite plain, indeed, that medical evidence in many cases could not exist without such a rule and practice; for in that way we obtain not only the best, but even the only attainable evidence. On the other hand, it is equally clear that the rule should be applied with circumspection, and if I may trust my own experience. not without more circumspection than is usually shown. It is not to be supposed that even medical man, and much less an unprofessional person, while not at the moment aware of the probable future importance of his inquiries, will be so observant of what a deceased person says of the particulars of an illness, of their order of occurrence, of their progress and dates prior to the witness seeing him, as the witness would subsequently wish that he had been, when he finds himself deposing to all these facts in a court of justice. Nevertheless, I do not think I have often seen adequate circumspection observed in receiving such hearsay evidence—an omission which can scarcely be referred to any other circumstance than that, by education, neither judge nor counsel can be prepared effectually to test and check it.

I may here notice, from the trial of Mrs. Smith for poisoning, an apt illustration of an important imperfection thus left in the proof. The prisoner was seen to administer a potion to her maid-servant in a suspicious manner on a Tuesday evening; and in three days the latter died of poisoning with arsenic. A fellow-servant, however, who slept with the deceased, did not observe her to be ill at all on Tuesday night, or particularly so till the evening of next day; on that day, indeed, she was even able to eat a hearty dinner. But her medical attendant, who, visiting her for the first time on Friday evening, found her very ill and evidently dying, and who did not then suspect poison, but thought she had cholera, deposed that she told him she had been exceedingly ill with burning pain, vomiting and purging all Tuesday night and all Wednesday. Had this fact been clearly established, the proof of administration would have been very strong. But it rested on hearsay evidence; and the witness who supplied it, neither at the time of collecting it, nor I suspect even at the time of delivering it, was aware of its extreme importance. Nor did the court seem to be aware of this, nor to observe the discrepancy between his evidence and that of the fellow-servant of the deceased until it was too late; when another professional witness, who did notice the discrepancy, explained that the operation of arsenic could not be suspended for so long a period as from Tuesday evening, when the suspicious potion was administered, until the evening of Wednesday, when the symptoms of poisoning were by all accounts undoubtedly developed. Which of the two opposite statements was correct? The direct evidence of the fellow-servant—or the hearsay evidence of the surgeon? A very grave question. For the proof of administration was the only weak point of the case against the prisoner. A more searching examination might have cleared up the apparent contradiction; and had it done so, the prisoner would have scarcely escaped with a verdict of "Not Proven."

As facts derived from testimony constitute often so material a part of medical evidence, it is essential that he who has to form opinions from them shall be placed in favorable circumstances for detecting them, for judging of their truth, and for appreciating their bearings and their force. In England this is easily accomplished; because witnesses are allowed to be present during the whole trial, so as to hear one another's evidence. And in criminal trials there is additional access to information, through the publicity given to the preliminary proceedings, both of the coroner's jury, and of the police magistrate. It is only in very special circumstances, and on rare occasions, that the witnesses at an English trial are excluded from court, and not unless this be requested by the counsel, for reasons which are assigned. It is very difficult in Scotland; where the practice, whether in civil or criminal courts, is a rigorous separation of the witnesses at the precognitions, and exclusion of them from court upon trials until the examination of each begins. Speaking of precognitions, Mr. Alison says, "It is a proper precaution in magistrates to separate witnesses as much as possible during their examination" (Practice, 489). On trials, too, as he observes, "witnesses should not remain in court to hear the depositions of the other witnesses who precede them" (Ibid., 542). And in point of fact this precaution is now followed in both circumstances, much more scrupulously than might appear from Mr. Alison's mode of enunciating the rule.

The rule in question, however, has been by no means invariably observed. On the contrary, until a rather recent date, it had been very much relaxed in the instance of medical witnesses. My own experience will sufficiently show how unsettled really has been the practice. On the first occasion of my being cited professionally for the crown, viz., in 1825, I had not been concerned with the medico-legal proceedings at the precognition; no information was communicated to me about the case in any other way, and I did not hear the evidence at the trial. As it was eventually found unnecessary to examine me, I know not how counsel proposed to do it. For the trial was one for murder by a blow on the head; and the main question, which related to the connection of a fatal erysipelas with the injury inflicted, was to be cleared up principally by medical facts, obtained throughout the evidence of the general witnesses, and such as no unprofessional man could accurately collect and arrange. Next year, on the trial of David Kennoway before the High Court of Justiciary for parricide, a partial improvement was admitted, by allowing the medical witnesses to hear all the evidence of the general witnesses. But they were excluded as soon as the medical examination commenced, even as to facts merely. In the autumn of the same year, on the trial of Clark at the Perth circuit for the murder of an infant by locking it up in his writing desk, the medical witnesses were allowed to be present during the whole trial. And this was at the recommendation of the judge himself, the late Lord Gillies, who justly remarked, that "in such a case, where much depended on the state and appearance of the child's body when first seen by unprofessional persons, and on the nature and position of the articles in the desk which had compressed and marked the body, nobody but a medical man could tell what were or were not medical facts in the evidence of the general witnesses." In the High Court of Justiciary the somewhat undue latitude of this arrangement soon afterwards underwent some restriction. And in 1827, on the occasion of the trial of Mrs. Smith, it seemed to be decided, for the first time with some degree of form, that the medical witnesses should be admitted to hear all the general evidence, and all the facts of the medical evidence, but not the statement of the case by counsel, or the medical opinions of one another. In conformity with that rule, the precognition was often put before the medical witnesses prior to the trial, to facilitate their inquiries as medical experts, or for their opinion in consultation. This wise and reasonable adjustment, suggested, I believe, by the late Sir William Rae, when Lord Advocate, and sanctioned by the present Justice-General when Lord Justice-Clerk, and at the head of the criminal court, became to all appearance so firmly fixed, that it has been quoted by good legal authority as part of the criminal practice of the country. Thus Mr. Alison, speaking of the usual practice of excluding witnesses in general from the court, remarks: "To this there is an exception in the case of medical witnesses; who should remain to hear the deposition of the witnesses who depone to the facts of the case" (P. 542). "To this rule," he repeats, "there is an important exception in the case of a medical witness called on to give a professional opinion; who not only may, but ought to, remain in court when the examination of witnesses *in causa* goes on." "In all the late trials for murder, accordingly, * * * the medical gentlemen on both sides, who were to give a professional opinion, were present during the whole time." "But," continues he, though they "should hear the whole *facts* of the case detailed by the other witnesses, whether professional or ordinary, who are examined in the cause, yet it is usual, when one medical man begins to give *an opinion*, to cause other medical men to retire" (P. 535). And so of precognitions, where he speaks of the usual practice to keep the witnesses ignorant of one another's declarations, he excepts "the case of a medical witness who is called to give an opinion merely professional; for he should see the precognition, or hear the declarations of the witnesses, as well as the subjects on which he is called to speak, on the same principle on which he is directed to remain in court during the trial, till the medical *opinion* of the witnesses begins" (P. 489).

Mr. Alison's work was last published in 1833; and for some years afterwards the rules he thus inculcates continued to be observed in all courts. But within nine years more a change was again made, and the original exclusive practice was suddenly restored in all its rigor; and so it now remains. In civil as well as criminal trials, medical experts, and medical men consulted for their opinions, are not now allowed to see the precognition. Medical witnesses are not permitted to remain in court, to collect for themselves the facts on which their opinion is to be founded. In the preliminary proceedings they are told only what the counsel or agent may consider to be medical facts, and sometimes very little even of them. And upon trials, they are dependent for the elements of their opinions on the counsel and the judge; who indeed do their best to collect and arrange the medical facts for them, and put questions bearing on the case, but as much as possible in general terms, and without reference to its specialties. One or two deviations from this rule have occurred on the circuits, but it is rigorously observed in the High Court of Justiciary.

The reason for this retrograde step has never been publicly assigned.

But it cannot be any indefeasible principle in Scoth law; for the preceding narrative shows, that the law is sufficiently pliant in this matter to admit of almost any rule. I may therefore be allowed to point out the objections which exist on the side of medicine to the present system —objections which every medical man must have felt, who has been engaged in medico-legal practice.

[To be continued.]

THE MOTIVE POWER OF THE BLOOD.

[Communicated for the Boston Medical and Surgical Journal.]

The discussion at present carried on in the pages of the Journal, relative to the motive power of the blood, is one of unusual interest to the profession. The student of nature must be pleased with every discovery or advancement in any branch of science, though such progress should conflict with pre-established theories, and cause some dissension among those earnestly devoted to the cause of truth. There may be something of a conservative spirit in the profession; but in this era of intelligence and improvement, few can be found who *will* not read and think. When it becomes necessary to remove landmarks, let us do so cheerfully, but by all means be sure not to leave a right position for a wrong one.

The manner in which the new theory of the circulation of the blood is brought before the profession, forms a bit of romance worthy of notice. The lady-physiologist, fearing the calculating spirit of the North, would seem to have sought the "sunny South," that the new theory may have the benefit of light and air, and commits the care of the fledgling to a gentleman possessing chivalry, character and learning. The discoverer is apotheosized; in place of an eagle set at liberty, an alligator is immolated on the altar of science. Now to say nothing of the crocodile tears that may have been shed on the occasion, it appears to me that the "truth" which has required nineteen years' tender care to bring it to its present maturity, and is now indebted to but one valorous arm for protection, should not boast of much native vitality. I have no desire to break a lance with Dr. Cartwright, but as the glove is thrown down, I suppose the discussion open to the profession.

The fact that the new theory has required but one experiment to prove it, is a little strange. One experiment may prove the *truth*; but this experiment proves as much for Harvey's as for Mrs. Willard's theory. Neither the experiments of Brodie nor Dr. Cartwright disprove that the heart continued its contractions after respiration had ceased; and there are numerous facts to show that such action is sustained. Not long since, the details of an experiment made with the heart detached from its connections were given to the profession. The heart contracted for an hour or more after such separation; at first as forcibly as if connected with its proper tissues and receiving its accustomed stimulus. The experiments of Dr. Dawson, reported in the Journal of

Feb. 25th, are corroboratory of the same facts. Why this intense motor tendency of the heart, if it is but an auxiliary in the circulation?

The profession may have been a little at fault in the theory of artificial respiration. The *saurian* experiment throws some light on the matter. It is an additional instance of the value of artificial respiration, but can claim nothing more. Dr. Cartwright does not enlighten us any on the subject: he used the common means for the restoration of an asphyxiated *nouveau né*, and with usual success; the gold snuff-box is the only peculiarity in the transaction. The fact of resuscitation from asphyxia by artificial respiration, does not any more prove the lungs to be the *primum mobile* of the circulation, than resuscitation, in cases almost equally numerous, by cold affusion, proves the skin to be the motive power of the circulation. Perhaps the skin, as a source of oxygen to the blood, has been underrated; it certainly has, according to this theory.

Mrs. Willard supposes the blood to be oxygenated by inspired air; that such oxygenation produces motion, *per se*. The addition of oxygen to the blood may produce heat, latent or developed, but how does this help the theory? Does simple expansion produce motion? Dr. C. says, "The blood could not derive heat from respiration, without deriving more or less power of motion; because caloric is not inoperative." How is caloric operative to produce motion? Does simple expansion of a body cause change of place? Air may exert its revivifying effects on the blood in its passage through the lungs; but can such chemical change produce motion? In resuscitation, if the blood derives its motive power from the respiration, why is not this motion towards the right ventricle, equally with the left auricle? Mrs. W. says the "blood *must* move, must move where it *can* move." The sigmoid valves prevent its flow into the right ventricle, of course the other direction must be taken; and the heart assumes re-action because the blood does. This appears to be the theory. The fact of the heart's acting without any blood, and detached from all pulmonary connection—even for a short time—presents some difficulty. The fact appears to be, that when respiration is re-commenced in cases of suspended animation, the heart, by the law of organic sympathy, almost coincidently re-assumes its function, urging a current of blood through the lungs. In the new theory, the valves of the heart and arteries would but seldom be in requisition. Mrs. Willard calls philosophy to her aid. "The lower particles becoming rarefied, are pressed to the surface by the denser particles"—thus producing motion. The anatomy of the lungs should refute this argument. But little change of place is admitted in capillary tubes which permit the passage of but single globules in succession; and the direction of these tubes is as much against as with the course of gravity. No doubt particles of bodies change place in being subjected to the laws of chemical affinity; but such motion is chemical motion, extending to insensible distances. An immense amount of respiration would be necessary to sustain circulation under this hypothesis.

Dr. Cartwright says, "The vivisection clearly proves that the *primum mobile* of the circulation, and the chief motive power of the blood, are in the lungs, and not in the heart." I do not know exactly, notwithstanding the above plain language, how much its friends claim for the new theory. Do they maintain that the lungs can support circulation, independent of the heart? Harvey's theory maintains that the heart supports circulation, independent of the lungs. One pretension should be equal to the other. The mixture of mythology, science and experiment, thus far developes that "Niliacus" speedily came to his senses under the manipulations of Dr. Dowler. As remarked by Dr. Chandler, organic life, evidently, was not extinct. The lower orders of vertebrata are often far from being dead when they appear so.

The extract from Cuvier should involve the new theory in as much difficulty as the old. He says that "animals enjoy the power of motion precisely in a degree corresponding to the quantity of respiration." The converse of this proposition is not easily proved; but we take different ground from Dr. Cartwright. So far from respiration being a cause of motion, motion is a cause of respiration. The Author of animal creation made abundant and varied provision for motion and respiration. We hold that in animals in all other respects formed for a high degree of motion, and to whom such motion is essential to existence, the blood passes through the right side of the heart to the lungs to receive that degree of calorification requisite to such state of existence. In others less highly endowed with capacities for motion, and to whom such motion is not essential to existence, the blood may, or may not, pass entirely through the lungs. The latter is the case with amphibia. The foramen ovale exists in these animals. The blood, instead of circulating through the lungs, may in part pass into the left side of the heart, and thus into the general circulation. An indeterminate quantity circulates in the lungs. But does calorification of a part produce motion of the whole? The heart in such animals continues its contractions, whether respiration is continued or not. If the blood is obstructed in the pulmonary tissue, it passes through the foramen ovale, and thus avoids the difficulty—proving that the heart sustains circulation, independent of all aid from the lungs.

How will Mrs. Willard's theory account for dilatation of the right ventricle? If the heart is passive in the circulation, the right ventricle certainly cannot be dilated by a regurgitating column of blood, and some other cause must be found.

Why, in the economy of nature, is the heart placed immediately before the lungs, in the order of the circulation, if the lungs are the chief motive power? If an auxiliary organ is needed, why is not the heart placed towards the other extremity of the circuit, that the momentum may be more in equilibrium? Instead of such an arrangement, we find the heart in the place, relatively, which should be occupied by the centre of the circulation—by its motive power, if any such motive power exist. Mrs. Willard does not, that I am aware, explain the utility of pulsation in the blood; but attempts to show how a pulsation somewhat similar may be made with an India-rubber tube filled with water. Waiving the question of pulsation in general, what is the economy of pulsation in the right side of the heart, which is so soon to be quieted in the pulmonary circulation? If nature often worked at disadvantage, such an arrangement might be expected, under Mrs. W.'s theory. But the blood might flow in an uninterrupted stream from the venæ cavæ to the lungs, and not be subjected to pulsation in passing through the heart—as probably would be the case if the new theory were true.

The fœtal circulation presents some difficulties to the new theory. This subject has already been alluded to by one of your correspondents. We are assured by anatomists that there are evident traces of a circulation, before any other function of the animal economy is established—even from the first days of embryo existence. At the end of the first month, the heart has taken shape, and is performing its functions as a heart. At the end of the second month, the rudimentary lungs are found. Does Mrs. W. claim that the circulation is maintained through the maternal vessels? Such communication is not satisfactorily proved to the profession. The new theory is obliged to take one or the other horn of the dilemma. If it is contended that this connection exists, where is the proof? If denied, we ask, what is the motive power in the circulation of the fœtus?

In the fœtus, as before remarked, the foramen ovale permits a part of the blood to pass from the right to the left auricle; the ductus arteriosus permits an additional quantity to pass into the aorta from the right ventricle, instead of going to the lungs; so that the lungs do not circulate more than one fourth of the blood before, that they do after birth.

The discussion of this theory—be it true or false—will have a beneficial influence in establishing the present course of practice in suspended animation, and very probably in improving it; and though *perhaps* disappointed of the expected light on this branch of physiology, much good may result to the profession in the discovery of additional therapeutic means for the cure of disease. W. W. Goff.

York, Mich., March 15th, 1852.

SPIRITUAL COMMUNICATIONS.

[Communicated for the Boston Medical and Surgical Journal.]

"Every dog has his day," saith the adage, and the wisdom of the fathers is in it. Of late, "spirits" are the "dog," and we may well consider them as having their day; and if we mistake not, their day will soon be over. The "spirits" have "rapped and tapped," "tipped tables and pulled hair," predicted events which never took place, told "*whoppers*" and been exposed, and on the whole shown themselves very ignoble spirits at best. They have vied with each other in impiety; and although their tricks have been fully exposed, still they carry on their operations.

But leaving the impiety and rascality of their proceedings out of account, the *puerility* of their performances is enough to stamp *humbug* on all their manipulations. He must have, truly, a high estimate of the dignity of his own "spirit," who could suppose it capable, in a disembodied state, of engaging in such *utterly* childish manifestations of itself, even were it possible! But a certain class of minds must be deluded by mystery. If the mist and darkness be removed, and the monster they had wondered at, and feared, is shown in the sun light as a *stump*, they will forthwith rush into some dark corner and see another.

Nor are men of profound learning, and piety even, always free from self-deception. The learned and pious Pres. Dwight, with hundreds of other not less respectable men, certified most confidently to the wonderful virtues of Perkins's metallic tractors. But Perkins's tractors live only in the records of imposture—a monument of the facility with which men impose on themselves and others. Nor will it be long before many "triumphant" *arts and sciences* will be laid in the same oblivion with them. Others will take their places, for men love to be deceived.

Spiritual rappings are now at a discount, at least among the better portion of the community. They challenged the investigation of scientific men, and it was given. But any *juggler* can perform feats that Prof. X. cannot explain, and yet they shall be *mere tricks*. But if the learned professor give his attention to them, and profess himself in doubt as to their nature, it is all one with the mass as if he declared them supernatural, and they will be deluded on the strength of his doubt. The fact that Prof. A., and Rev. Dr. B., and Dr. C., attended the "spiritual performances" and could not at once *see through them*, was the cause of many being deluded. Had they waited a little they would have seen it to be a trick, as it has developed itself to be, nor would the multitude have been deluded by their means. Certain forms of imposture clamor loudly for scientific investigation. It serves to draw attention, and render it famous, and though it may be shown an imposture, it will have gained its object. Scientific investigation has *advertised* it, and the multitude have been imposed upon. It is not the duty of scientific men to investigate every new wonder, as soon as it is born. It is their duty to wait till time has fairly shown it to be a *well-begotten* wonder. "Spiritual rappings" are now well understood. No spirit need be concerned in them, but that of the operator and a few associates in the flesh. But the "spirits" cannot yet be dismissed. Now they "drive the grey goose quill," and instead of giving oracular responses form the dead, who yet dwell in flesh, execute autographs and give responses in accordance with the *wish* of the operator.

We have now "spiritual communications" without any aid of spirits. But this theory is hardly worth a long article, were it not for its embodying certain principles which we think questionable, and for its influence on a certain class of men.

We agree with Dr. Taylor in his estimate of mesmerism, biology, psychology, &c., and would place "spiritual performances" in the same category. Spiritual writing is evidently an off-shoot of "spiritual rappings." But this root has been already dug out of the ground, and though like the up-rooted elm in early spring, it may put forth buds, and even develope leaves, the summer will cause them to wither and die.

It is no uncommon thing for men to be deceived by their senses.

Men of intelligence may be thus deceived, and instead of adding importance to the subject on which they err, only show the weakness of human nature. Still less uncommon is it for men of moderate mind to become insane on some predominant hobby. Witness the delusion of Millerism. Its *votaries believed they felt and saw* the physical signs of the earth's dissolution. They had the evidence of sense *to themselves*, but this imposed no obligation on men to investigate their vagaries.

Dr. Taylor takes the pen in hand, and it begins to write. He invokes the spirit of his nephew, and the pen writes his name. Then he thinks of the initials of his name, and the pen writes these. All this, says Dr. Taylor, was involuntary. Here we should demur. Many a man has deceived himself respecting his volitions. These were written, he says, in a hand which he never should have used, and which he *thinks* was the hand of his nephew. He omitted an important step in his experiment, viz., the proof by comparison that it was so.

"What is peculiarly worthy of remark," says Dr. T., "is that t moving power in making an O throws round convulsively oftentim twice, *always* twice if you wish it." But the movement of the hand *involuntarily*, yet *always* in accordance with a *wish*, is remarkable. This is much like spiritual communications without a spirit. Thus we have a *voluntary* act *involuntarily* performed! So, too, he "could not *make*" his hand write "Mormon." *Make* his hand perform an involuntary act! He "could *make* it write anything he *pleased*"! He invoked the spirit of his father-in-law, and he, i. e., the spirit, which by the way is no spirit at all, only detached "vitalized electricity," informs him that the Roman Catholic religion is the best. But he says the hand writes what is in the mind of the operator. Dr. T. is, if we mistake not, a member of the protestant church. Either, then, the hand fails to tell what is in his mind, or he is recreant to his faith. Mr. Lincoln's spirit could of course have nothing to do with it. So, too, he *lets* his pen fall back on the t's if this is to be relied on. But he *lets* the pen make so many *involuntary* movements, that we suspect it moved in this case in accordance with the wish evidently in his mind.

So much for his facts. Now for his "theory." This is truly given in the *rough*, and we think the author may well invoke some scientific man to smooth it. Electricity, from its intangible nature, has always been a source of deception. Perhaps it is so yet. Dr. T. thinks it "detached vitalized electricity" which performs these wonders. His reasons are—1st, that the pen, when held loosely in his hand, began to dip and twirl like a horse-shoe magnet; and 2d, that the pen said "yes" when he asked if it was that. When holding the pen loosely in the hand, it might well make certain motions which he could imagine resembled the movement of the magnet. In the next place, the pen writes what is in his mind. He says it is "detached vitalized electricity," and the pen writes it, and *so it is*.

Dr. T. evidently assumes the identity of the nervous influence and electricity, to which no physiologist would assent. This same transmitted influence he says is the mind. "But the term 'mind' is only a name for that certain something which passes, in a continuous current, from the brain to the hand and makes it write." We had supposed the mind was an entity, a being; but Dr. Taylor makes it electricity, a dependent on matter, if not matter itself. This has been the dogma of certain disbelievers in man's moral nature and future existence, but should not be of those who believe in them.

But there is another consequence of Dr. T.'s theory, which may be of some advantage to our legal friends, and *some* of their clients. If the "vitalized electricity" of another person may become detached and settle on my hand, and make me write, then it may also make me do anything else. Thus my hand may, under the influence of another's "electricity," commit murder, and I be hung for another's crime. As the plea of insanity is getting rather stale, we would commend this to the notice of our legal friends.

Again, the respectable men to whom Dr. T. refers, consider this the work of spirits. He pronounces this delusion, but still claims an investigation on their account. He acknowledges that a belief in its being the work of spirits contributes greatly to the success of the experiment. It does so by fixing the mind on the *writing* more strongly. But the mind fixed strongly on one thing is but poorly fitted to observe its own operations. Dr. Taylor, intent on the writing, forgets that he *willed* the hand to write. The pen, he says, moved in accordance with his wish, which is certainly an anomaly in involuntary action.

Dr. T. and his friends are not the first who have deceived themselves in this way, we suspect. The famous feat of his Satanic majesty, in the time of our fathers, with the bible and key, was of the same nature. So, too, the "divining rod," by which many a good man pointed out his beds of ore and hidden springs, operated on the same plan. Intent on the movement, they did not perceive the volition in consequence of which it moved. This power is nothing new. Dr. Taylor and his friends can deceive themselves just as well as our fathers could.

Finally, we say with him, "If it rains, we will let it rain"; but we wish to know whether it is rain, or only water thrown from a *pint cup!*

Stafford Spa, Ct., March, 1852. S. S.

PHOSPHATE OF LIME IN PHTHISIS.

To the Editor of the Boston Medical and Surgical Journal.

Dear Sir,—I was surprised that one of your correspondents, recently, in giving the cold shoulder to the phosphate of lime, should have announced the discovery of its use in these words: "Somebody out West discovered this remedy, and stated it to the profession through a medical journal. Immediately half the physicians in the land are found prescribing it for phthisis."

This remedy appears to have been first used, and scientifically tested in reference to its power of producing cells, by Dr. William Beneke, resident physician at the German Hospital, Dalston, and was brought to the notice of the English public by able articles in the London Lancet of April and June, 1851. From reading these articles, Dr. Stone, a learned medical professor in New Orleans, was induced to try its virtues, and subsequently commended it to American practitioners.

It is well known that the salts of phosphoric acid are essential for the formation of azotic compounds—compounds which are necessary to to sustain animal life. In regard to the phosphate of lime in particular, it was pretty satisfactorily proved in the above-named articles in the Lancet, that it influences and increases the production of cells, and of course must be an important element in the treatment of those diseases —consumption included—characterized by emaciation, or lack of cell-growth. It should be remembered, too, as collaterally illustrating this fact, that the tribasic phosphates of potash, soda, lime and magnesia, play an important part in the growth and perfection of plants. They are always found in the seeds of the cerealia, and no mature grains are produced where phosphates are absent from the soil. For the production of abundant grain crops, it is necessary that these salts should exist in the soil, or be applied to it in manures.

It is known, moreover, that in all chronic diseases, distinguished by wasting of the tissues, a much larger quantity of phosphates is excreted by the kidneys, than in the normal state. Hence there is no healthful growth; and the human organism, like the soil exhausted of its phosphates by successive croppings, brings nothing to perfection, and needs to have its drained salts re-supplied.

It would seem from these considerations, that not the phosphate of lime alone—though that may be the most important—but the phosphates of potash, magnesia and soda, are needful for the best production of those proteinous compounds on which nutrition depends. I am persuaded that the phosphate of potash particularly should be added, by some manufacturer, to the list of chemicals.

I cannot but draw attention here to the inorganic substances found in healthy human blood. According to careful analysis by Schmidt,

1000 parts of blood corpuscles contain		1000 parts of liquor sanguinis (serum and fibrin) contain	
Chlorine	1.686	Chlorine	3.644
Sulphuric acid	0.066	Sulphuric acid	0.115
Phosphoric acid	1.134	Phosphoric acid	0.191
Potassium	3.328	Potassium	0.323
Sodium	1.052	Sodium	3.341
Oxygen	0.667	Oxygen	0.403
Phosphate of lime	0.114	Phosphate of lime	0.311
Phosphate of magnesia	0.073	Phosphate of magnesia	0.223

Iron is omitted. Now I venture the prediction, that out of these figures, mainly, with those which represent the constituents of the saliva, the bile, the gastric juice, and the organic compounds of the blood and tissues, are to be evolved, within twenty years, a correct and partially demonstrative system of therapeutics.

In consumption, all the inorganic bodies represented by the above figures are deficient in quantity. By reflecting upon the proportions of these several bodies—particularly upon the large amount of chlorine and soda in the plasma, and of potassium in the corpuscles—the mind can hardly fail to obtain useful hints. I have not hesitated to make this suggestion the ground of a free use of alkalies in phthisis, particularly by the endermic method, and have been well rewarded by their application. There has plainly got to be a freer use of potash in its various forms. With chlorine and sodium we are tolerably well supplied in the common salt taken in our food.

Consumptives who expect to sit down and swallow cod-liver oil, or even oil and phosphate of lime, or any other one or two remedies, having no competent medical advice, and doing nothing else, and in this way get well, will, in nine cases out of ten, experience a fatal disappointment. The disease is not to be conquered in so easy a manner. He who would in any case compel its surrender, must attack it on all sides, as the invincible Scott did the City of Mexico, and with a resolution as firm, if not with a marshalling of forces as skilful. The first thing to be done is to learn the strength of the enemy's position; or, dropping the figure, to examine the chest with the view of learning the nature and extent of the disease. To do this properly is a science in itself, and one not carelessly to be acquired. This done, the disease, if found, must be watched at every step, and each new development promptly met by a remedy chosen, not at random, but scientifically and for a reason. It is only when the disease is thus treated—not by any one remedy merely, but by constitutional, topical, hygienic, each and all—and by men of competent ability, who *aim* at nothing short of its final mastery, that we can look for more than occasional recoveries. Nor can I think any one fitted to deal with this most fatal disease of our climate in the best manner, who is not acquainted with the microscope, and with the present state of animal chemistry. IRA WARREN.

Winter Place, Boston, March 25, 1852.

THE SUFFOLK DISTRICT MEDICAL SOCIETY.

Meeting for Medical Improvement, March 27, 1852.

REPORTED FOR THE JOURNAL BY GEO. STEVENS JONES, M.D.

IT was expected that Dr. H. I. Bowditch would read, at this meeting, the report of the Committee on intermittent fever, as mentioned in the last report of the proceedings of the Society; but in consequence of his indisposition, the reading was deferred until the next monthly meeting.

Dr. E. B. MOORE spoke of the frequency of cases of empyema that had recently came under his observation. He had seen three patients within the last three weeks, upon whom paracentesis was performed with the happiest results. In one of the cases, a tumor presented itself at one side and lower part of the sternum; and, on opening it, half a pint of pus was discharged. This patient had also thrown off pus in considerable quantities from the lungs. Nevertheless, after the operation, the air gradually permeated the compressed lung, and the patient was restored to health. In another case, in which Dr. Bowditch assisted him, the patient, a lady 34 years of age, had had a pneumonia, but recovering from it took a severe cold, and was attacked with pleurisy, which was followed by effusion in the pleural cavity. Forty-one ounces of pus were drawn off by means of the syringe attached to the trocar. The urgent symptoms were immediately relieved, the lung soon restored to its healthy function, and the patient regained her health. The other case which he mentioned, was a patient of Dr. Bowditch's; there was much effusion in the chest, the pus was withdrawn, and the same happy results followed as in his patients after the operation. Dr. Moore thought it better to operate early, in such cases, when it was apparent that there was effusion in the pleural cavity, even should the matter not point externally. He had a decided preference for the syringe in drawing off the matter; it was a safer and more thorough method than the one formerly practised.

Dr. H. J. Bigelow wished to make some additions to a statement made by him, at a previous meeting, relative to the operation of tracheotomy for croup. When in Paris, last summer, M. Trousseau informed him that, in his operations of the last two years, out of twelve, five were successful; out of sixteen, seven were successful; and out of nineteen, six were successful. Trousseau's theory was plausible enough; that, whether the disease were chiefly at the larynx, or in the smaller bronchi, which it often affects, yet the constriction at the vocal cords, in limiting the supply of fresh air, must have a serious and depressing effect upon the system. It was in fact, as far as it went, a mechanical obstruction in the windpipe, which the operation relieved for the time. Dr. B. remarked, that the cases to which tracheotomy was best adapted were of course those in which the disease was local in the larynx and had not extended to the small bronchi; and that, if we could always distinguish these cases, the operation could be sometimes strongly recommended. But the laryngeal disease cannot be always distinguished from that which is complicated with the pulmonary affection. Dr. B. had recently seen, in consultation, two cases of rapid croup, in the hands of very eminent practitioners, where he had fully agreed that the evidence was, on the whole, that the smaller bronchi were seriously involved; yet the autopsies revealed nothing but lymph localized in the larynx, the lungs being healthy. He now regretted that the operation had not been done in those cases. M. Trousseau stated to him that he now did the operation, as a last resort, in desperate cases, after other means had failed. In this point of view, it seems unobjectionable in certain cases, where there is not positive evidence of lymph in the small tubes, and where the laryngeal croup is marked; and the statistics above given, even allowing for exaggeration, must have great weight. Dr. B. exhibited a case of the double canulas, which he had from Trousseau, and spoke at length of the advantages which they possessed over the single. One of the objections to canulas heretofore, has been their liability of becoming filled up with the secretions of the part in which they are placed, and the difficulty of keeping them cleansed; whereas, by this arrangement of M. Trousseau, these difficulties are overcome, as the inner tube can be withdrawn by the nurse, and cleaned as often as may be wished. In doing this operation, it must be borne in mind that it is *only in the median line* that the dissections should be made. The venous hemorrhage, notwithstanding, is often very great; yet M. Trousseau, under such circumstances, makes a plunge through the rings of the trachea, and at once inserts his canula, trusting to the constriction around the tube and adjacent parts to stop the bleeding, &c.

Dr. Moore had seen a patient who had died from rupture of bloodvessels in the bowels, at the post-mortem of which the liver throughout was found to be of the color of *gamboge* or *tumeric*, and inquired if any of the gentlemen had met with such cases, and how often. Dr. G. C. Shattuck, Jr., had lately seen a man who had been living in Jamaica, who had a chronic diarrhœa for some time, pain in micturating, &c. He refused to take medicine, became very much anemiated, and died. At the examination, the liver and spleen were found to be remarkably *black*.

Dr. John Ware had seen a patient (a farmer, from the country) within a few days, who had been annoyed with a pain in the abdomen near the umbilicus, since last autumn, which at times varied like that caused by wind. It was more distinct than the pains in some forms of dyspepsia. There was no tenderness on making pressure, neither could there be detected any tumor. On examining with the stethoscope, from the chest downward, could distinctly hear a *bellows sound* over the spot said to be the seat of the pain. He had seen the man but once, and from that examination inferred that his difficulty consisted of an aneurism of the abdominal aorta. He had never before seen any thing exactly like it, and would inquire if any of the gentlemen had seen a case of incipient aneurism of the abdominal aorta. He thought cases presenting anomalous symptoms possessed an interest, and at these meetings might be discussed profitably to the members. Dr. H. J. Bigelow had seen an aneurism in the lower part of the thoracic aorta, in which case pain was the most prominent symptom. The diagnosis was imperfect during life; the autopsy revealed, however, an aneurism as before stated, which, having become ruptured, produced the death of the patient. Dr. Charles Ware recollected a case he had seen, where pain was also the most prominent symptom. The aneurism was in the thoracic aorta, and the tumor presented at the back of the chest of the patient, looking like an ordinary abscess; indeed, so much so, that it was proposed to open it, but nature getting the start, opened it herself. The patient died, and the autopsy revealed, as above stated, an aneurism of the aorta, which had ruptured.

Dr. Z. B. Adams mentioned the case of a gentleman to whom he was called, which being rather unique, he thought the particulars might be somewhat interesting to the members. The patient was 56 years of age, and had been a very active business man. He gave up his business and indulged freely in ardent spirits, after which he became *heavy*, *drowsy*, had almost a constant nausea, and at times severe fits of vomiting. He lost his appetite. It was at this stage of proceedings that Dr. A. was called to see him. Emetics and cathartics were given, which seemed for a few days to be of service; then he relapsed into his former state of drowsiness, appeared imbecile and even idiotic. One day, when the doctor visited him, he requested the attendants to retire, as he wished to see the doctor alone. When thus left alone, he tried to tell him something about a venereal propensity which he had had for some time, but was so unintelligible that he could make nothing out of it. The doctor noticed that the patient was constantly putting his hand to the back part of the head, and asked him if he had any pain there; he replied that he had. A blister was ordered to his occiput, extending to the ears. The next day found him some better; allowed the blister to heal, after which, had another applied, and for a fortnight he was most entirely free from his venereal propensity, though his mind had not been fully restored to its normal condition. Another blister was applied, which entirely relieved him of all his difficulty. Dr. Ware wished to know what other treatment was pursued in the case. Dr. Adams said none other than had been mentioned, save a very nourishing and hearty diet. This case of Dr. Adams's is a singular one, and it is presumed the facts connected with it will have a tendency to increase the phrenological enthusiasm in our community.

Dr. Geo. Heaton reported the case of a lady, 35 years of age, who had a severe pain in the right iliac region, which continuing to increase, a physician was sent for—who, upon examining her, discovered a tumor in the region of the pain, and declared it to be a hernia, and strangulated. A counsel was called, who confirmed this diagnosis, and recommended an immediate operation, to which the friends of the patient objected. She was brought to the city, to his house. He examined her carefully, but did not consider the case one of hernia. A large hard tumor, filling the right inguinal region, extending as high up as the umbilicus, was apparent. Upon examining per vaginam, he became satisfied that it was a diseased ovary and womb. Stimulating embrocations and blisters, externally, together with the internal exhibitions of the hydriodat. potassa, constituted the only treatment. At the end of four weeks the tumor and tenderness had nearly disappeared. Dr. Ware said that this case reminded him of two cases occurring in young women, which he thought at first were peritoneal inflammation—which proved, however, to be an inflammation of the cellular tissue. The whole "basin" of the pelvis was apparently filled up with a hard mass of matter, its boundary being well defined, as though a line had been drawn across from one spine of the ilium to that of the other. The patients gradually got well. Dr. Bigelow had seen, in the hospitals of Paris, cases of inflammation of the broad ligaments of the uterus, in which pus was discharged from the rectum. Dr. Ware had seen several such cases. Dr. Adams thought it very singular that the physicians, in Dr. Heaton's case, should make such an egregious mistake in their diagnosis of hernia, and he could not believe them to be so deficient of the proper knowledge in such cases.

The President gave notice that the annual meeting of the Society, for the choice of officers, counsellers to the parent Society—as also delegates to the next Medical Association—would take place on Wednesday, 7th of April, at 4, P. M. Dr. H. G. Clark will deliver the annual address, Saturday evening, 24th inst.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 7, 1852.

Progress of Dentistry.—Much has been said, of late, respecting a new method of constructing whole sets of artificial teeth—the invention of Dr. Allen, of Cincinnati. While some have condemned it as an old and abandoned affair, others, with equal spirit, have presented objections, on account of the danger of too many improvements. Dr. Guild, of Portland street, Boston, has shown us a set manufactured by himself, on the new principle, that were extraordinary for their close imitation of nature, and their beauty and nicety of finish. The perfect cementation of the enamel to the plate effectually excludes the fluids of the mouth, which are one of the main sources of an offensive breath in those who wear the ordinary kind of artificial teeth. If all the work on this new system is equal to Dr. Guild's specimen, the public will certainly appreciate the advantages it possesses over the common sort.

Gun-shot Wounds.—Dr. M'Sherry's lecture before the pupils of Dr. Dunbar, in Baltimore, will be regarded with peculiar favor by army and navy surgeons. Dr. M'S. confines himself strictly to his subject, which new lecturers sometimes fail to do. A re-perusal of the case of Gage, who had a tamping iron, weighing thirteen pounds, and measuring three feet and a half, shot through his head; and that of Alexis St. Martin, the fundus of whose stomach was shot away—without producing death in either case—brings to recollection some of the remarkable cases which have been recorded in our pages. One of the excellencies of this lecture consists in the encouragement it gives to the surgeon to persevere, for the resources of the art can sometimes do wonders when life is not extinguished on the entrance of the ball. The author's observations on the 20th page, touching wounds of the abdomen, should be remembered by the young operator, as, with all the skill of the age, death will sometimes ensue from the effects of wounds that are apparently trivial in their character. External injuries are easily commanded, but wounds in any of the cavities perplex and often defy the most ingenious and experienced masters. Dr. Dunbar's school must be among the best, if not the very best in Maryland. Some years ago, we inspected his apartments, his multiplicity of specimens of morbid anatomy, his books, instruments, and accompaniments, all of which were highly creditable to the taste and ambition of the proprietor. Dr. D. used to write excellent articles, and we should be glad to see something more from his pen.

Exsection of the Lower Jaw.—An article from the New York Medical Journal, on "The claims of priority in the exsection and disarticulation of the lower jaw," is now circulated in a pamphlet, with an appendix, containing the report of several operations performed by George C. Blackman, M.D., &c. A principal object in this paper is to show that Dr. Carnochan, of New York, has not accomplished as much in the performance of this exsection as some people have imagined, but that the glory belongs to Dr. Deadrick, of Tennessee, of having taken the lead in this great operation. Since that occurrence, now nearly half a century ago, cases have been multiplied. It is an age in which no one is allowed to appropriate to himself the honors of another, without exciting commotion, and hence the bare intimation that a false claim for priority is set up, is enough to rouse the sleeping lions. All the cases introduced by Dr. Blackman, from his own practice, are important and interesting ones.

Graduates at the Boston Medical School.—It will be seen, by reference to the last page in to-day's Journal, that a goodly number of graduates have gone out from our medical school the past year. This betokens a flourishing state, and we have no doubt the young men will compare favorably, in point of qualifications, with the graduates of any other school.

Discovery of the Male Acarus Scabiei.—It is stated in the Union Medicale that one of M. Cazenave's pupils, M. Languetin, has just found the male acarus scabiei upon the hand of a patient affected with the itch. It seems that this acarus had long been sought for in vain, and some works on skin diseases do not even mention its existence. As this parasite is very small, being less than half the size of the female, it had hitherto escaped detection.

Medical Miscellany.—At the Kentucky School of Medicine, Lexington, the late lecture term, there were 112 students, of whom 27 were graduated with the degree of M.D. The Spring term commenced in the same institution, March 15th, and will continue four months.—Susanna Huzzy, a colored woman, residing in Vermont, is a pensioner of the Government, being 103 years of age.—Dr. C. L. Hunter, of Lincoln county, N. C., found, a short time since, a diamond near his residence, in a stream, weighing half a carat.—Cholera was extending through the interior of Persia, by the last advices.—One Dr. W. Baldwin is the man accused of purloining, from the State department, papers relative to Mexican claims, at Washington.—Mrs. Eliza M. Willis, M.D., delivered a valedictory address at the Syracuse (so-called) Medical College.—A reprint of the memorial to the Legislature of Louisiana, for the registration of births, marriages and deaths, by the Medical Society of New Orleans, reads well. —Dr. Hunt, who was arrested at New Orleans, for killing a man in a duel, has been discharged.

To Correspondents.—A translation of Dr. Weber's treatment of Orchitis, and a paper on "Spiritual Knockings," have been received.

Erratum.—In last week's Journal, p. 175, the verdict of the Jury, in the first trial of Dr. Manning, should have been printed $362,50 instead of 562,50.

Died,—In Connecticut, Dr. Henry Durfee.—In Philadelphia, Dr. William R. Grant, Professor of Anatomy in the Pennsylvania Medical College.

Deaths in Boston—for the week ending Saturday noon, April 3, 65.—Males, 38—females, 27. Accidental, 1—disease of bowels, 1—disease of brain, 2—bronchitis, 1—consumption, 16—convulsions, 3—debility, 1—dysentery, 1—dropsy of brain, 9—fever, 1—typhus fever, 3—typhoid fever, 1—scarlet fever, 1—hooping cough, 1—disease of heart, 4—infantile, 1—inflammation of lungs, 7—marasmus, 1—measles, 1—old age, 4—rheumatism, 1—teething, 2—thrush, 2.

Under 5 years, 27—between 5 and 20 years, 4—between 20 and 40 years, 17—between 40 and 60 years, 7—over 60 years, 10. Americans, 32; foreigners and children of foreigners, 33. The above includes 7 deaths at the City institutions.

Medical School of Harvard University.—The following gentlemen have received the degree of Doctor of Medicine at this institution, during the year ending March 3, 1852:

Edward Watson Anderson, Portland, Me., thesis on *Hydrophobia.*
William Abraham Newcomb Archibald, Providence, R. I., *Leucorrhœa.*
Cyrus Killam Bartlett, Boxford, *Phlegmasia Dolens.*
Albert Henry Blanchard, Boston, *Paralysis.*
John Nelson Borland, A.B. (Yale), Boston, *Gangrene of Lungs.*
John Mills Browne, Boston, *Cancer.*
Freeman Josiah Bumstead, A. B. (Williams), Boston, *Caries of Vertebræ.*
Thomas R. Budlong, A.M. (Brown), Providence, R. I., *Remittent Fever.*
William Gibson Clarke, Halifax, N. S., *Peritonitis.*
Henry Milton Cobb, Woonsocket, R. I., *Phthisis.*
William Dickinson, A. M. (Dartmouth), Jackson, Miss., *Albuminuria.*
Henry Bowen Clarke Greene, Boston, *Fracture.*
John Cambridge Hall, Bridgeton, Me., *Affection of the Kidneys in Scarlatina.*
James Wardle Hartley, Fall River, *Dropsy.*
Charles Hosea Hildreth, Boston, *Morbus Coxarius.*
Eugene Francis Holland, Westfield, *Functions of Intestines.*
Frederick Augustus Jewett, Pepperell, *Diagnosis.*
Charles Kidder, Boston, *Neuralgia.*
Henry Martin Lincoln, Ashby, *Hemorrhoids.*
John Randolph Lincoln, Boston, *Croup.*
Joshua Rich Lothrop, A.B. (Dartmouth), Boston, *Imperfect Expansion of the Lungs.*
James Porter Lynde, Gardner, *Pathology of Inflammation.*
Alexander Donald William Martin, Boston, *Vesical Calculus.*
Benjamin McLuer, Moscow, N. Y., *Phthisis.*
Samuel Morrill, Concord, N. H., *Pneumonia.*
John Smith Nichols, A.B., Cambridge, *Rheumatism.*
Thomas Fletcher Oakes, Boston, *Life and Mind.*
Varillas Linus Owen, Chicopee, *Intermittent Fever.*
Andrew Jackson Park, Norwich, Canada, *Suppurative Inflammation of the Liver.*
George Renton, Boston, *Croup.*
Nathaniel Stillman Robinson, Chelsea, *Diaphragmatic Hernia.*
John Manchester Smith, Tisbury, *Typhoid Fever.*
James Stewart, Ashby, *Puerperal Peritonitis.*
Dexter Mills Tucker, Boston, *Dysmenorrhœa.*
John Whipple, A.B. (Brown), Malden, *Inflammation.*
Lorenzo Locke Whitmore, Ashburnham, *Hepatitis.*
Allston Waldo Whitney, Framingham, *Physical Exploration.*
Adams Wiley, A.M., Roxbury, *Phlebitis.*

OLIVER W. HOLMES, *Dean.*

Massachusetts Medical Society, Middlesex North Medical District.—At a meeting of this Society, held March 24, the following persons were elected delegates to the American Medical Association, for the year 1852. Drs. P. P. Campbell, of Lowell; Chas. A. Davis, of Lowell; B. Osgood, of Westford; Chas. E. Parker, of Pepperell; E. K. Sanborn, of Lowell; Daniel Holt, of Lowell.

CHARLES A. DAVIS, *Secretary.*